AMENDMENTS TO THE CLAIMS

1-105 (cancelled)

106. (Currently Amended) A portable heating system comprising:

a vessel having enclosed sides, a thermally conductive bottom end and a top end forming an opening for the introduction and extraction of contents to be heated, the bottom end having an external bottom side for receiving heat;

a heater comprising:

a top housing having a top rim coupled circumferentially to the external bottom ~~side~~ end of said vessel, a side structure extending downwardly from said top rim and having a plurality of exhaust vents formed therein, and a bottom rim;

a single thermally conductive member comprising a continuous piece of material fixedly attached to and positioned adjacent to and extending continuously along the entire extent of a peripheral edge of the external bottom side and having an inner peripheral edge defining an inner diameter and an outer peripheral edge defining an outer diameter, the conductive member having a plurality of undulating protrusions extending downwardly from the external bottom side;

a burner having a heat outlet head disposed below and in a central position with respect to said external bottom side and having a fuel intake port configured to couple to a fuel source, the heat outlet head having a diameter less than said thermally conductive member inner diameter and being configured to deliver heat to a central area of the external bottom side;

a bottom housing configured to couple to the bottom rim and substantially encasing the heat source, the bottom housing having a plurality of air inlet vents formed therein.

107. (Previously Presented) A portable heating system as set forth in claim 106 wherein said single thermally conductive member includes interconnecting segments between adjacent protrusions.

108. (Previously Presented) A portable heating system as set forth in claim 107 wherein said single thermally conductive member is generally square waved shaped in form.

109. (Previously Presented) A portable heating system as set forth in claim 107 wherein said interconnecting segments are substantially parallel to said external bottom side.

110. (Previously Presented) A portable heating system as set forth in claim 106 wherein said single thermally conductive member is composed of an aluminum material.

111. (Previously Presented) A portable heating system as set forth in claim 106 wherein said single thermally conductive member is formed of a strip having a thickness of about 0.012 inches.

112. (Previously Presented) A portable heating system as set forth in claim 106 wherein said single thermally conductive member has a radial dimension between said inner peripheral edge and said outer peripheral edge of about 0.3 inches.

113. (Previously Presented) A portable heating system as set forth in claim 106 wherein said protrusions of said thermally conductive member extend[[s]] downwardly about 0.5 inches.

114. (Previously Presented) A portable heating system as set forth in claim 107 wherein said interconnecting segments have a length between protrusions of about 0.05 inches.

115. (Previously Presented) A portable heating system as set forth in claim 106 wherein said single thermally conductive member has an aspect ratio which is in the range of about 8.66-9.48.

116. (Previously Presented) A portable heating system as set forth in claim 106 wherein said single conductive member is attached to said external bottom side by way of sonic welding.

117. (Previously Presented) A portable heating system comprising:

a burner having a heat outlet head disposed centrally below a surface to be heated and having a fuel intake port configured to couple to a fuel source, the heat outlet being generally round in form and having a fixed diameter and being configured to deliver heat to a central area of the surface;

a single thermally conductive member comprising a continuous piece of material fixedly attached to and positioned adjacent to and extending continuously along the entire extent of a peripheral edge of the surface and having an inner peripheral edge defining an inner diameter and an outer peripheral edge defining an outer diameter, with said inner diameter being greater than said fixed diameter, the conductive member having a plurality of undulating protrusions extending downwardly from the surface;

a skirt having a top rim coupled circumferentially to the surface and encasing the protrusions, the skirt having a series of exhaust vents formed therein and having a bottom rim;

a base configured to couple to the bottom rim and substantially encasing the burner, the base having a set of air inlet vents formed therein.

118. (Previously Presented) A portable heating system as set forth in claim 117 wherein said single thermally conductive member includes interconnecting segments between adjacent protrusions.

119. (Previously Presented) A portable heating system as set forth in claim 118 wherein said protrusions and interconnecting segments form a generally square waved shape.

120. (Previously Presented) A portable heating system as set forth in claim 118 wherein said segments are aligned substantially parallel to the surface to be heated.

121. (Previously Presented) A portable heating system as set forth in claim 117 wherein said single thermally conductive member is composed of an aluminum material.

122. (Previously Presented) A portable heating system as set forth in claim 117 wherein said thermally conductive member is formed of a strip having a thickness of about 0.012 inches.

123. (Previously Presented) A portable heating system as set forth in claim 117 wherein said thermally conductive member has a radial dimension between said inner peripheral edge and said outer peripheral edge of about 0.3 inches.

124. (Previously Presented) A portable heating system as set forth in claim 117 wherein said protrusions extend downwardly from the surface about 0.5 inches.

125. (Previously Presented) A portable heating system as set forth in claim 118 wherein said interconnecting segments are about 0.05 inches in length.

126. (Previously Presented) A portable heating system as set forth in claim 117 wherein said thermally conductive member has an aspect ratio in the range of about 8.66-9.48.

127. (Previously Presented) A portable heating system as set forth in claim 117 wherein said thermally conductive member is attached to said surface to be heated by way of brazing.

128. (Previously Presented) A portable heating system as set forth in claim 117 wherein said thermally conductive member is attached to said surface to be heated by way of sonic welding.

129. (Previously Presented) A system for heating a substance, the system comprising:

a vessel having enclosed sides, a thermally conductive bottom end and a top end forming an opening for the introduction and extraction of the substance, the bottom end having an external bottom side having a central area for receiving heat;

a series of integrally connected, thermally conductive protrusions comprising a continuous piece of material fixedly secured to and positioned adjacent to and extending continuously along the entire extent of a peripheral edge of said external bottom side, the protrusions extending from the vessel external bottom side and defining with the central area a cavity with a fixed diameter; and

a heater comprising a heat source having a heat outlet header disposed below said cavity and configured to deliver heat to the cavity said header being generally round in shape and having a diameter that is less than said fixed diameter.

130. (Previously Presented) A system as set forth in claim 129 wherein said protrusions are interconnected by segments between adjacent protrusions.

131. (Previously Presented) A system as set forth in claim 130 wherein said protrusions and interconnecting segments selectively form a generally square waved shape.

132. (Previously Presented) A system as set forth in claim 130 wherein said interconnecting segments are disposed substantially parallel to said external bottom side.

133. (Previously Presented) A system as set forth in claim 129 wherein said protrusions are composed of an aluminum material.

134. (Previously Presented) A system as set forth in claim 129 wherein said protrusions are formed of a strip having a thickness of about 0.012 inches.

135. (Previously Presented) A system as set forth in claim 129 wherein said protrusions have a radial dimension between said inner peripheral edge and said outer peripheral edge of about 0.3 inches.

136. (Previously Presented) A system as set forth in claim 129 wherein the length of said protrusions extending from the external bottom side is about 0.5 inches.

137. (Previously Presented) A system as set forth in claim 129 wherein said thermally conductive protrusions have an aspect ratio in the range of about 8.66-9.48.

138. (Previously Presented) A system as set forth in claim 129 wherein said thermally conductive protrusions are secured to the external bottom side by way of brazing.

139. (Previously Presented) A system as set forth in claim 129 wherein said thermally conductive protrusions are secured to the external bottom side by sonic welding.

140. (Previously Presented) A heating vessel for use with a heater for heating a substance, the heater having a heat source including a burner head and a port for coupling to a fuel supply system, the heating vessel comprising:

a vessel having enclosed sides, a thermally conductive bottom end and a top end forming an opening for the introduction and extraction of the substance, the bottom end having an external bottom surface having a central area; and

a series of integrally connected thermally conductive protrusions comprising a continuous piece of material fixedly attached to and positioned adjacent to and extending continuously along the entire extent of a peripheral edge of said external

bottom surface, the protrusions extending from the vessel and defining, with the central area, a cavity of a fixed diameter;

wherein the burner head is disposed generally centrally below said cavity and has a diameter that is less than said fixed diameter.

141. (Previously Presented) A system as set forth in claim 140 wherein said protrusions are interconnected by segments between adjacent protrusions.

142. (Previously Presented) A system as set forth in claim 141 wherein said protrusions and interconnecting segments selectively form a generally square waved shape.

143. (Previously Presented) A system as set forth in claim 141 wherein said interconnecting segments are disposed substantially parallel to said external bottom side.

144. (Previously Presented) A system as set forth in claim 140 wherein said protrusions are composed of an aluminum material.

145. (Previously Presented) A system as set forth in claim 140 wherein said protrusions are formed of a strip having a thickness of about 0.012 inches.

146. (Previously Presented) A system as set forth in claim 140 wherein said protrusions have a radial dimension between said inner peripheral edge and said outer peripheral edge of about 0.3 inches.

147. (Previously Presented) A system as set forth in claim 140 wherein the length of said protrusions extending from the external bottom side is about 0.5 inches.

148. (Previously Presented) A system as set forth in claim 140 wherein said thermally conductive protrusions have an aspect ratio in the range of about 8.66-9.48.

149. (Previously Presented) A system as set forth in claim 140 wherein said thermally conductive protrusions are secured to the external bottom side by way of brazing.

150. (Previously Presented) A system as set forth in claim 140 wherein said thermally conductive protrusions are secured to the external bottom side by sonic welding.

151. (Currently Amended) A portable heating system comprising:

a vessel defining a cavity having enclosed sides, a thermally conductive bottom end and a top end forming an opening for the introduction to and extraction from said cavity of contents to be heated, the bottom end having an external bottom side for receiving heat;

a top housing having a top rim coupled circumferentially to the external bottom ~~side~~ end of said vessel, a side structure extending downwardly from said top rim and having a plurality of exhaust vents formed therein, and a bottom rim;

a bottom housing having a top rim configured to be selectively coupled to the top housing bottom rim and containing a burner having a heat outlet head disposed below the external bottom side when said bottom housing is coupled to said top housing, said bottom housing further having a plurality of air inlet vents formed therein;

wherein said bottom housing is so configured and sized as to be removable from said top housing and temporarily placed for storage in said vessel cavity.

152. (Previously Presented) A portable heating system as set forth in claim 151 wherein said bottom housing is so configured and sized as to be temporarily contained within said vessel cavity in an upright position with its top rim facing said vessel top end.

153. (Previously Presented) A portable heating system as set forth in claim 151 wherein said burner fuel intake port is disposed at a lower end of said bottom housing so as to facilitate the coupling to a fuel source in a position below said bottom housing.

154. (Previously Presented) A portable heating system as set forth in claim 153 wherein, when said fuel source is coupled to said burner fuel intake port, both the bottom housing and the fuel source are storable in said vessel cavity.

155. (Previously Presented) A portable heating system as set forth in claim 154 wherein said fuel source is threadably coupled to said burner fuel intake port.

156. (Previously Presented) A portable heating system as set forth in claim 151 wherein said bottom housing also includes an igniter which extends to a position above said heat outlet head.

157. (Previously Presented) A portable heating system as set forth in claim 156 wherein said igniter has a portion which is disposed above the level of said lower housing top rim.

158. (Previously Presented) A portable heating system as set forth in claim 157 and including a cover for said vessel top end, said cover having an indention therein to receive a portion of said igniter when said bottom housing is stored in said vessel cavity and said top end cover is in place over said vessel top end.

159. (Previously Presented) A portable heating system as set forth in claim 151 wherein said bottom housing top rim is coupled to said top housing bottom rim by way of frictional fit of said top housing bottom rim within said bottom housing upper rim.

160. (Previously Presented) A portable heating system as set forth in claim 158 and further wherein said bottom housing upper rim includes one or more inwardly extending dimples that register with corresponding slots in said upper housing.